



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Jarzabkowski, P., Bednarek, R. and Cabantous, L. (2014). Changing competitive dynamics in the reinsurance industry: implications of changes in buyer behavior for reinsurance executives. *The Journal of Financial Perspectives*, 2(1), pp. 27-38.

This is the published version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/8642/>

**Link to published version:**

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Article:

**Changing competitive dynamics in the reinsurance industry:  
implications of changes in buyer behavior for reinsurance executives**

# The Journal of Financial Perspectives

EY Global Financial Services Institute

March 2014 | Volume 2 - Issue 1



Building a better  
working world

---

The EY Global Financial Services Institute brings together world-renowned thought leaders and practitioners from top-tier academic institutions, global financial services firms, public policy organizations and regulators to develop solutions to the most pertinent issues facing the financial services industry.

*The Journal of Financial Perspectives* aims to become the medium of choice for senior financial services executives from banking and capital markets, asset management and insurance, as well as academics and policymakers who wish to keep abreast of the latest ideas from some of the world's foremost thought leaders in financial services. To achieve this objective, a board comprising leading academic scholars and respected financial executives has been established to solicit articles that not only make genuine contributions to the most important topics, but are also practical in their focus. *The Journal* will be published three times a year.

[gfsi.ey.com](http://gfsi.ey.com)

The articles, information and reports (the articles) contained within *The Journal* are generic and represent the views and opinions of their authors. The articles produced by authors external to EY do not necessarily represent the views or opinions of EYGM Limited nor any other member of the global EY organization. The articles produced by EY contain general commentary and do not contain tailored specific advice and should not be regarded as comprehensive or sufficient for making decisions, nor should be used in place of professional advice. Accordingly, neither EYGM Limited nor any other member of the global EY organization accepts responsibility for loss arising from any action taken or not taken by those receiving *The Journal*.

---

## Editorial

### Editor

**Shahin Shojai**  
EY LLP

---

### Advisory Editors

**Dai Bedford**  
EY LLP  
**Shaun Crawford**  
EY LLP  
**Carmine DiSibio**  
EY LLP

**Ratan Engineer**  
EY LLP  
**David Gittleson**  
EY LLP  
**Bill Schlich**  
EY LLP

---

### Special Advisory Editors

**David Cole**  
Swiss Re  
**Paul Feeney**  
Old Mutual Wealth  
**Paolo Fiorentino**  
UniCredit

**Mark Hartigan**  
Zurich  
**Robert W. Jenkins**  
London Business School  
**Thomas C. Wilson**  
Allianz

---

### Editorial Board

**Viral V. Acharya**  
New York University  
**John Armour**  
University of Oxford  
**Tom Baker**  
University of Pennsylvania  
Law School  
**Philip Booth**  
Cass Business School and IEA  
**José Manuel Campa**  
IESE Business School  
**Kalok Chan**  
Hong Kong University of Science  
and Technology  
**J. David Cummins**  
Temple University  
**Allen Ferrell**  
Harvard Law School  
**Thierry Foucault**  
HEC Paris  
**Roland Füss**  
University of St. Gallen  
**Giampaolo Gabbi**  
SDA Bocconi  
**Boris Groysberg**  
Harvard Business School  
**Scott E. Harrington**  
The Wharton School  
**Paul M. Healy**  
Harvard Business School  
**Jun-Koo Kang**  
Nanyang Business School  
**Takao Kobayashi**  
Aoyama Gakuin University  
**Howard Kunreuther**  
The Wharton School

**Deborah J. Lucas**  
Massachusetts Institute of Technology  
**Massimo Massa**  
INSEAD  
**Patricia A. McCoy**  
University of Connecticut  
School of Law  
**Tim Morris**  
University of Oxford  
**John M. Mulvey**  
Princeton University  
**Richard D. Phillips**  
Georgia State University  
**Patrice Poncet**  
ESSEC Business School  
**Michael R. Powers**  
Tsinghua University  
**Andreas Richter**  
Ludwig-Maximilians-Universitaet  
**Philip Rawlings**  
Queen Mary, University of London  
**Roberta Romano**  
Yale Law School  
**Hato Schmeiser**  
University of St. Gallen  
**Peter Swan**  
University of New South Wales  
**Paola Musile Tanzi**  
SDA Bocconi  
**Marno Verbeek**  
Erasmus University  
**Ingo Walter**  
New York University  
**Bernard Yeung**  
National University of Singapore

---

---

# Executive summary

## **Changing competitive dynamics in the reinsurance industry: implications of changes in buyer behavior for reinsurance executives**

**by Paula Jarzabkowski**, Professor of Strategy, Cass Business School, City University,  
**Rebecca Bednarek**, Research Fellow, Cass Business School, City University and  
**Laure Cabantous**, Senior Lecturer, Cass Business School, City University

This paper explores how reinsurers can meet the rapid changes occurring in their industry, arising from primary industry consolidation, and changes in cedent (insurance firm) buyer behavior toward bundled reinsurance products and alternative sources of capital. The paper makes the following suggestions for reinsurers. Reinsurers need to be proactive in responding to changing patterns of premium volume and develop partnerships with global clients. Smaller reinsurers, in particular, will need to look to develop competitive niches and joint-ventures in order to be significant to these large cedents. Furthermore, reinsurers need to continue investing in analytical expertise and resources in order to address the complex needs of their clients. Finally, reinsurers will be increasingly required to engage in alternative risk transfer products, and there will be early-mover advantages in doing so meaningfully.

---

# Changing competitive dynamics in the reinsurance industry: implications of changes in buyer behavior for reinsurance executives

**Paula Jarzabkowski**

Professor of Strategy, Cass Business School, City University

**Rebecca Bednarek**

Research Fellow, Cass Business School, City University

**Laure Cabantous**

Senior Lecturer, Cass Business School, City University

## Abstract

In recent years, the structure of the reinsurance industry has evolved rapidly in response to, among other factors, changes in the nature of risks to be insured (e.g., climate related risks), technological innovations (e.g., Cat models), the globalization of the financial services industry, and the concentration of the primary insurance industry. Drawing on a global qualitative dataset of interviews and observations in all the main reinsurance markets, this article provides an overview of the changing dynamics in the reinsurance industry and highlights some of the implications of these changes for reinsurers. We first provide a general overview of the changing structure of the reinsurance industry, highlighting its increasingly competitive nature and why these changes might exert pressure on reinsurer's profits. Second, we focus on consolidation in the primary industry as a central industry dynamic. Third, we show how this impacts the types of reinsurance products cedents want from the reinsurance industry. Finally, we outline some implications of this for reinsurers, identifying matters of both strategic and operational concern for them.

## Introduction

The modern reinsurance industry, which is basically the insurance of insurers, has a long history, at least in Western Europe, with the first reinsurance treaties arising in Germany after 1820 and the first reinsurance company, Kolnische Ruchversicherungsgesellschaft (Cologne Re), founded in 1842 [Kopt (1929)]. Historically, there has been little change and a relatively slow rate of innovation in the reinsurance industry [Tuohy (2008)]. More recently, however, this mature industry, which is part of the global financial service industry, is experiencing intensified competition and regulation. In particular, as a result of consolidation in the primary insurance industry, cedents (i.e., the insurers who look to buy risk cover from reinsurers) are changing the way they buy reinsurance, and these changes are escalating rapidly with many implications for reinsurers. In this article, we explore the increasingly competitive and changing dynamics of the reinsurance industry, and the implications of these dynamics for reinsurance executives. To do so, we draw from a novel qualitative study of the global reinsurance industry, which covered the industry's main players and markets (see textbox 1).

Our analysis of the structure of the reinsurance industry, which is based on Porter's five forces framework, first shows why it is more difficult to make money in the reinsurance industry than ever before [Porter (1980)]. Second, we conduct an in-depth analysis of the industry life cycle of the primary insurance industry. Third, this lifecycle analysis reveals how consolidation in cedents' buying of reinsurance is evolving the very notion of the reinsurance product as cedents' needs shift to a new class of product. Such changes are evidently hard for most reinsurers to respond to and keep abreast of. We will, therefore, end with the implications of such trends for reinsurance executives. We highlight implications for different types of reinsurers as well as specific issues in relation to the internal operations of reinsurers, the specific issue of non-traditional reinsurance products (Alternative Risk Transfer) and reinsurance needs in emerging markets.

## General overview of the reinsurance industry structure

A review of the reinsurance industry suggests that the "risk business" is getting riskier and more competitive. To structure the findings of our empirical research we use Michael Porter's (1980) "five forces" framework. Porter's model is a tool derived

The primary data for this study was conducted over three years from 2009 to 2012. It consisted of:

1. 22 reinsurance firms, 3 brokerage firms and 36 insurance firms across 17 countries, and 61 offices in all non-life lines of business
2. 837 observations of multiple interactions and periods of analysis
3. 446 interviews (reinsurers, brokers and cedents)

Following 2012, extensive secondary data, for example, press articles and reports, and conversations with industry, for example, meetings with senior executives and strategy Masterclasses for reinsurance professionals continue.

### Textbox 1: Global reinsurance study

Source: Bank of England calculations

from industrial economics that is widely used for analyzing the attractiveness of an industry (i.e., its potential to generate higher than average profit margins) and for classifying features that affect the degree of competition in the industry. It identifies that industry structure, and its associated profit margins are determined by the interplay of five forces: bargaining power of buyers, bargaining power of suppliers, threat of new entrants, threat of substitute products, and intensity of industry rivalry. In the reinsurance industry, our analysis suggests that the profitability in the non-life reinsurance segment (our focus here) is eroding [Datamonitor (2011)].

First, and foremost, is **buyer power**. In reinsurance terms, insurers pay to "cede" or transfer risk to reinsurers, and these insurance-industry buyers are therefore known as "cedents." As will be discussed in more depth below, the general trend for insurers is consolidation, meaning bigger and more powerful cedents. Of course, buyer power is not uniform; smaller insurers and insurers in emerging markets remain highly reliant on reinsurance as a proxy for capital, freeing up internal capital reserves to fund growth. But considered as a group, cedents have been bulked-up by consolidation into large, often global, insurance companies that are "heavy hitters" in their negotiations with reinsurers. Large cedents have massive market capitalizations that can be far superior to those of large

reinsurers. For example, Allianz, a major European insurance firm, had a market capitalization of €53.4 billion (in August of 2013), its reinsurer Munich Re's market capitalization was €24.4 billion and Hannover Re's was €7.1 billion<sup>1</sup>. These large cedents also place billions of dollars of insurance, and thus dwarf even the largest reinsurers in terms of premium volume; while AXA as one of the largest insurers in the world underwrote U.S.\$108 billion in premium in 2010; Munich Re, as the largest reinsurer, underwrote "only" U.S.\$29.3 billion [Reactions (2012)]. Such large cedents can, therefore, use their buyer power to lower the rates they pay for the amount of reinsurance cover they buy. Ultimately, they can afford to reduce their cover as their size allows them to retain more of their risks in-house (see below). Thus, in general, consolidation of cedents is squeezing reinsurance profits.

**Substitute** products are threatening if they offer a better price-performance ratio than an industry's core products. In many segments of the global reinsurance market, for over a decade cedents have been using methods of Alternative Risk Transfer (ART), primarily in the form of Cat bonds, as a cheaper substitute for traditional reinsurance products [Loubergé, et al. (1999), Bougen, (2003)]. Cat bonds are insurance-linked securities for which returns depend on the occurrence of a specific insurance event. They are not normally considered part of the core reinsurance market, as they are not generally offered by reinsurers, but rather by hedge funds and pension funds. In fact, since 1996, the Cat bond market has seen U.S.\$44b of cumulative reinsurance issuance. While Cat bonds, together with the hedge funds and pension funds that provide them, took a hit in the financial crisis, they have since bounced back and, by 2012, reached their highest level for new issuances and outstanding volumes in four years [Aon Benfield (2012a)]. All of this is money that is not going to reinsurers via traditional reinsurance products. Furthermore, importantly Cat bonds usually compete favorably on price with traditional reinsurance products, placing further competitive pressure on reinsurers.<sup>2</sup> Another important form of substitution is internal retention: cedents simply doing without the reinsurance

product by instead covering in-house more of their own risks. This option is in fact connected to the increased buyer power described above. As one chairman of a large cedent outlined: "In the long term if you understand risk capital and how it works then you keep more of your risk yourself. But, no doubt, the long-term consequence is to reduce the amount of reinsurance that you place. In our case, we placed a fifth less than we did just five years ago." (Cedent, interview) For instance, in-house retention of casualty and property-per-risk is increasing as cedents increasingly consider that they can carry more of these risks themselves, rather than transferring them to reinsurers [Aon Benfield (2012b)]. In general, use of substitute products, and internal retention, both of which deprive reinsurers of premium, are increasing as a result of consolidation in the insurance industry.

Reinsurers are reliant on various types of **suppliers**, such as suppliers of capital (e.g., capital inflows from investors within the broader financial market), suppliers of analytic services (e.g., risk modelling companies), suppliers of other services (e.g., brokerage firms) and the general supply of human resources – well-trained, highly skilled staff. If the cost of capital, services or human resource goes up, it eats into reinsurance profitability. To provide two examples, let us consider the power of brokers (the intermediaries or suppliers of clients to reinsurers) and modelling companies. First, in the past years, brokers have consolidated alongside their buyers (see above), so attaining global scale and scope. As a result, three main global brokers, Aon Benfield, Guy Carpenter and Willis, now have 85% market share of the industry.<sup>3</sup> These changes have resulted in a largely oligopolistic broking market. As these brokers have grown in size, the reinsurance industry has become increasingly "brokered" and previous "direct" (non-brokered) markets such as Europe increasingly depend on brokers in a way that was unthinkable 15 years ago. New players use brokers to access new markets and previously-direct reinsurers are also increasingly relying on them. Further, as these large consolidated brokers have grown in strength, they are more able to provide services to their clients (such as analytics) which large reinsurers used to provide as part of their differentiation, so increasing competitive pressure on reinsurers.

1 2013 capitalization figures collected from company websites (August, 2013):  
[https://www.allianz.com/en/investor\\_relations/share/share-price.html](https://www.allianz.com/en/investor_relations/share/share-price.html);  
[http://www.munichre.com/en/ir/shares/key\\_figures/default.aspx](http://www.munichre.com/en/ir/shares/key_figures/default.aspx) ;  
<http://www.hannover-re.com/ir/share/keyfigures/index.htm>

2 For example: <http://www.artemis.bm/blog/2013/07/12/ils-and-collateralized-capital-flow-benefits-reinsurance-buyers-at-renewals-aon/>

3 Source: <http://www.holborn.com/%5CData%5CSites%5C1%5Cpdfcontent%5CBestsReview-HoldingTheirOwn.pdf>



Second, modelling companies form another important group of suppliers to the reinsurance sector. Even if reinsurers have their own internal models, they are reliant on three big modelling companies, AIR, RMS and EQE<sup>4</sup>, due to the widespread usage in the industry of these few select models. Modelling companies are suppliers for the industry as a whole, providing a framework for analyzing risk which brokers and cedents – as well as reinsurers' competitors – use. The power of these modelling companies has increased as the industry has become more technical in the last decade. This is partly in response to the demands of regulation; and partly because of cedents' bundling of analytically challenging "super-risks" (discussed below). In general, increasing technical sophistication is giving more power to suppliers of analytical models, and to potential reinsurance employees with rare technical skills; both drive up the cost base for reinsurance operation.

Like substitute products, **new entrants** compete on the basis of price-performance ratios, but as industry outsiders they have to overcome barriers to entry. In reinsurance, close longstanding relationships between reinsurers and cedents have traditionally posed an important barrier to entry; but recently, their perceived value to cedents seems to have waned. The regulatory environment represents another such barrier to entry due to its (increasingly) stringent nature (Directive 2009/138/EC of the European Parliament and Council). While these barriers offer some protection for incumbent reinsurers, they are far from insurmountable especially from among hedge funds and insurers. Such companies can more easily scale entry barriers, using their prior knowledge and resources. As reinsurers explained: "Hedge funds – we see them as a threat because they take the steam out of our market. Smart money knows when there is money to be made. So when profitability is high, "Money" goes and starts a new Bermuda entity, and that takes a little bit of the steam out of our market" (Reinsurer, interview). In particular, hedge funds have been providing both CAT bonds (as described above) in the reinsurance market and also traditional reinsurance products. Consequently, the two trends of new entrants and substitute products are closely connected. With their established pools of investment capital, they jump the barriers to entry represented by the capital intensity of reinsurance. In particular, there was

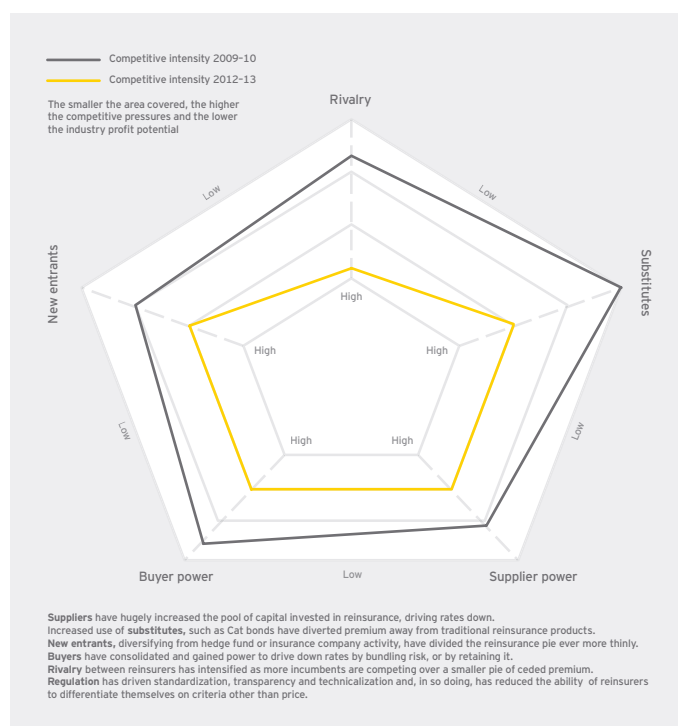


Figure 1. Porter's five forces analysis; reinsurance industry [Porter (1980)]<sup>5</sup>

a strong increase in the number of such new entrants following the 2005 hurricane season (which included Katrina), when rates were at a historical high, a phenomenon referred to as the "new Bermudian market."

In 2011-12, several well-known hedge funds continued to announce the formation of reinsurance companies in response to fickle investment opportunities elsewhere, and because they wanted to use reinsurance premium as a captive pool of capital to reinvest in the hedge fund itself. Examples include two U.S.\$500m Bermudian reinsurance companies, TP Re and SAC Re, set up by hedge funds in 2012.<sup>6</sup> This trend continues to increase: 2013 saw the largest ever Cat bond issued to a first

4 EQECAT: <http://www.eqecat.com/>; RMS (Risk Management Solutions): <http://www.rms.com/>; AIR Worldwide: <http://www.air-worldwide.com>

5 Jarzabkowski, P., M. Smets, R. Bednarek, and A. Allocato, 2013. "Re-think reinsurance," Global Reinsurance Masterclass Series

6 Source: <http://dealbook.nytimes.com/2012/09/04/with-lax-regulation-a-risky-industry-flourishes-offshore/>

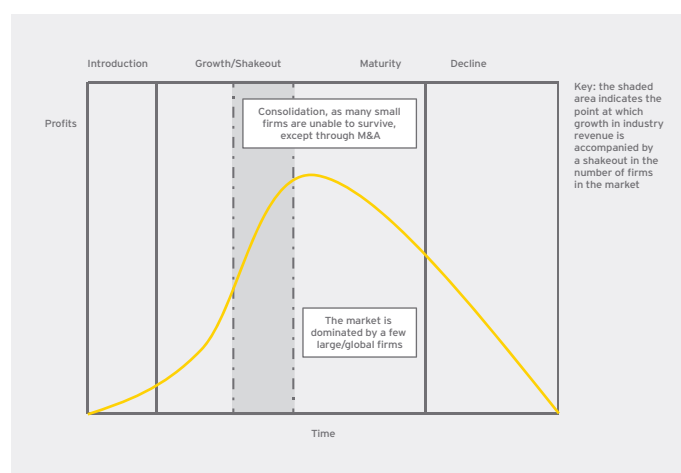
time sponsor, a U.S.\$750m issue for Citizens Property Insurance (Florida). This was a company that many thought would never tap the Cat bond market; but for Citizens the benefits were clear: “they have upped their overall level (of cover) ... at a lower rate than what Citizens paid in the reinsurance market last year.”<sup>7</sup>

**Increased rivalry.** As Figure 1 shows, our analysis suggests that every one of the five forces has increased its pressure on reinsurance profits over the past couple of years, and led to intense rivalry between reinsurers. As one reinsurer states of this recent increased competitiveness: “There has been a big change from an almost guaranteed profit ... to much more capital flowing in to the industry, and really leading to new products and much increased competition. At the end of the day, it has become much more difficult to make money with reinsurance” [Reinsurer, interview]. In particular, this is because many of these dynamics are interrelated – for example, cedent power, ability to retain risk rather than cede it as reinsurance premium, and an increased ability by those powerful cedents to engage with new capital providers, such as hedge funds, to provide new products, such as Cat bonds. In the following section, we explore one of the primary sources of this increasing pressure.

### The insurance industry life cycle: a mature industry facing increasing concentration

Trends in the primary insurance industry are likely to change what insurance companies need from their reinsurers. We now discuss the insurance industry life cycle [Klepper and Miller (1995), Peltoniemi (2011)], provide evidence of consolidation in this industry and show how this consolidation impacts the products reinsurers are required to deliver.

While in some developing markets, such as those in parts of Asia, Latin America and Eastern Europe, the number of insurance companies is growing [SwissRe (2011)], the overall trend in the insurance industry is one of consolidation into a small number of key players [Connings (2013); Applebaum (2012)]. For example, in the U.S., the 10 largest Property and Casualty insurance companies now control 50% of the entire U.S. insurance market; and in auto insurance, that share is held by just five companies [Applebaum, (2012)]. This



**Figure 2: The industry life-cycle model [Klepper and Miller (1995); Peltoniemi (2011)]<sup>8</sup>**

consolidation is consistent with the industry life cycle analysis, which predicts that industries heading toward maturity, such as the insurance industry – are characterized by the shakeout of small players, as Figure 2 shows.

Over the last 10 years, large insurance companies have sought to enhance their product and geographic reach, client base and operating efficiency (i.e., economies of scale and synergies) through a range of organic growth, joint venture and M&A activity. For instance, both the number and the value of M&A activities have increased in the insurance industry over the last decade [Deloitte (2012a)]; and in December 2012 alone, 75 deals worth a total of US\$18.25b were reported.<sup>9</sup>

As powerful insurance companies have grown, and moved to the new and more profitable emerging markets, smaller insurers have protected their bottom lines by divesting non-core or underperforming businesses and subsidiaries, while withdrawing from foreign markets where they lacked sufficient scale [Deloitte (2012b)]. Such growth in leading insurers indeed correlates with a decrease in the overall number of players in mature markets.

<sup>7</sup> Source: <http://www.artemis.bm/blog/2012/06/07/everglades-re-catastrophe-bond-was-cheaper-than-reinsurance-for-citizens/>; <http://www.bloomberg.com/news/2012-05-23/florida-outperforms-as-hurricane-forecast-improves-muni-credit.html>.

<sup>8</sup> Jarzabkowski, P., A. Allocato, R. Bednarek and M. Smets, 2013. “Fit for purpose? How to tailor reinsurance products to insurance lifecycles,” Global Reinsurance Masterclass Series.

<sup>9</sup> Source: <http://www.reactionsnet.com/Article/3137361/Regions/23102/Insurance-M-A-fell-in-2012-to-54bn.html>;

For example, the number of companies in Europe fell by almost 3% in 2011, with the number in some more crowded markets, such as the U.K. dropping by as much as 8% in a single year [Insurance Europe (2013)]. The “lost” companies failed in the face of competitive pressure, merged, or were acquired. The impact of such consolidation is evident, with large players now dominating insurance markets. Their presence is felt through their size, as evidenced by their massive market capitalization, and their scope in operating across multiple markets. In short, over the last 10 years (between 2002 and 2011), on average, leading insurance companies increased their total revenues by approximately 37%.<sup>10</sup> Further, 20 of the top 25 companies increased their asset size in 2011 [AM Best (2012)].

The global consolidation of insurers, resulting from the fact that this industry is now mature, changes cedents’ strategies for buying reinsurance. In the following sections, we discuss how industry life cycle effects cascade from the primary insurance industry to affect the reinsurance industry.

### The implications of cedent consolidation for reinsurance buying

Our research shows that insurers do not all want the same type of reinsurance product from reinsurers. Depending on their size for instance, insurance companies have different priorities in the purpose, products and organization of reinsurance buying. Specifically, we identified differences in the reinsurance needs of four central types of cedents (see textbox 2). This means that as the general industry trend moves away from local market players and becomes dominated by global and regional players the reinsurance products that reinsurers are required to deliver also change.

### What determines cedent buying preferences?

From our research, we found that cedents’ reinsurance buying needs (or preferences) depend on two main criteria: their capitalization and the need for central coordination. These depend on size and scope of the insurer.

1. **Emerging market insurers** are those that operate in a single emerging market territory, or in a small number of similar territories and require reinsurance for access to capital and to alleviate overall portfolio volatility.
2. **Local insurers** are those that, while well-established within well-known territories, still practice largely within their country or state of origin.
3. **Regional insurers** are those that have extended beyond their domestic market to include surrounding regions.
4. **Global insurers** are at the peak of all three dimensions, as they operate in diverse territories and cover different lines of business through their complex multidivisional structure.

#### Textbox 2: Insurer-types

► **Capitalization** – the purpose of reinsurance is to support risk transfer through capital provision. In general, insurers need to hold capital reserves in order to cover potential payouts to their policyholders in the event of losses. Reinsurance transfers some of the primary-insurers’ risk to reinsurers who, in return for a premium payment, hold their own capital in reserve for large payouts to multiple policyholders in the case of an event that causes a particularly large loss. This enables insurers to cover more clients without holding all the capital themselves or free up some of their capital to invest in furthering their growth ambitions. Insurers’ level of capitalization influences their reinsurance needs. Less well-capitalized (i.e., smaller) players require reinsurance as a source of affordable capital, enabling them to grow or to cover greater risk for their clients. By contrast, well-capitalized insurers, particularly those with high capital efficiency arising from well-diversified portfolios, do not need reinsurance to either grow or to transfer some of the risk from their portfolio.<sup>11</sup> Rather, they require it to cover peak risk – those “Armageddon scenarios” where a single event, such as a hurricane, or the asbestos crisis, wipes out a major part of the portfolio, and the company is flooded with claims. The growth of such large well-capitalized players arising from the consolidation

<sup>10</sup> This percentage has been calculated considering the total revenues growth of select leading companies reported in Datamonitor in 2002-12. When the specific data was missing, it was read on the investor relations section of the company website.

<sup>11</sup> They can, however, make their capital go further by holding highly diverse risks, which are unlikely to be triggered by a single social trend, or change in business conditions, or environmental catastrophe.

outlined above is, therefore, changing their reliance on reinsurance cover and the types of products they require.

- **Need for coordination** – the need for coordination is a function of the insurer’s size and scope. As insurance companies grow into new markets, they evolve from allowing local operating companies (LOC) to purchase their own local reinsurance cover to coordinating buying centrally across all LOCs. This central coordination of reinsurance purchasing enables capital efficiency through diversification, avoids duplication regarding the reinsurance being bought as a firm acquires more LOCs, and ensures that a group has oversight of, and is adequately hedged for, risks taken by LOCs. By contrast, smaller companies have fewer opportunities for capital efficiency and less need for formal coordination of reinsurance buying. Globally coordinated purchasing of reinsurance is also a more efficient and less costly working practice. Consequently, with the growth of global cedents, there are more opportunities for coordination – globally and regionally – whereby risks across multiple LOCs worldwide or regionally, such as aggregated catastrophe covers, can be “bundled” together. This will now be discussed.

### The rise of super-risks and alternative risk transfer products

As discussed above, the types of reinsurance products that cedents need depend on their capitalization level and their need for coordination, which are, in turn, a feature of their size. The reinsurance industry has, therefore, become dominated by products that align with large, well-capitalized and centrally coordinated global buyers’ changing reinsurance needs. Specifically, our research identified three main reinsurance products that are associated with different types of cedents’ needs:

- **Bouquet products** bundle multiple or heterogeneous lines of business<sup>13</sup> all related to a single territory and are usually associated with quite small, local and emerging market buyers and small insurers.<sup>14</sup>

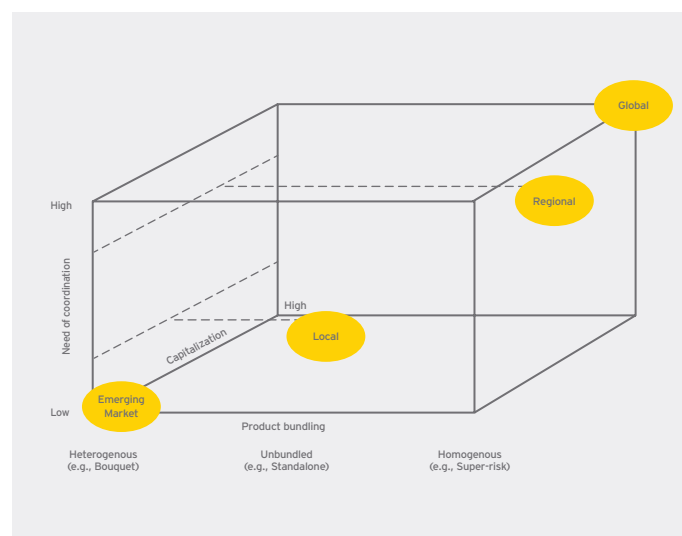


Figure 3. Insurers’ and their reinsurance products needs <sup>12</sup>

- **Standalone products** cover one line of business, for example a single type of risk, such as a third party motor liability product, within a clearly defined territory or closely related territories, and are usually associated with local buyers that have grown to be significant in their local markets but have little business outside these markets.
- **Super-risk products** bundle reinsurance cover from a homogenous line of business, such as catastrophe risk, across multiple perils, such as wind and flood, and multiple territories; increasingly globally. These products are usually associated with global and regional buyers who want to centralize their buying.

Our analysis shows that, as a result of consolidation, some of these traditional reinsurance products are declining, while those that meet the needs of large insurance companies are increasingly dominant and command the majority of premiums in the reinsurance industry.

<sup>12</sup> Jarzabkowski, P., Allocato, A., Bednarek R. and M. Smets, 2013. “Fit for purpose? How to tailor reinsurance products to insurance lifecycles”, Global Reinsurance Materclass Series.

<sup>13</sup> Line of business is the general classification of type of (re)insurance being written, i.e., homeowner, aviation and marine, among others (<http://www.guycarp.com/content/guycarp/en/home/the-company/media-resources/glossary/l.html>).

<sup>14</sup> When insurance companies are very small and it is therefore not worthwhile for reinsurers to reinsure their portfolio as standalone programmes they typically bundle different lines (e.g., marine combined with property) into a single reinsurance product, the bouquet. Demand for a bouquet can also be connected to not having enough statistics on the various parts of your portfolio to place on their own.

### Implication 1: Declining bouquet purchases and standalone products

Given the industry trends outlined above, demand for these “bouquet” and “standalone” products will decrease or remain stable in the coming years. Linked with very small, local and emerging market buyers, these bouquet products or “bundled heterogeneous” products are declining in popularity. As one CEO of a reinsurance company stated: “It’s [bouquets] something of the past. There are a few bouquets around Eastern European ... but this is being phased out more. Because bouquets are simply blurring the picture, you want to ensure that you look at each business on its own merits ... I don’t think there’s a future for bouquet placements at the moment” [Reinsurer]. While, they remain in demand in some emerging markets and from some small insurers, where firms have risks that are too small to be attractive to reinsurers on a standalone basis, they remain a small and decreasing part of the reinsurance market.

Stand-alone products are also a traditional product that used to dominate reinsurance. However, these single line and territory products are under threat as local market buyers decline and larger players seek greater efficiency in their reinsurance spend through centrally coordinated purchasing. Specifically, as global players acquire local companies, standalone reinsurance products disappear from the market, and are being replaced by their new parents’ bundled “super-risks”, which we now discuss.

### Implication 2: Increasing global and regional covers (super-risks)

The dominant players in the industry – large regional and global insurance players – require bundled homogenous products that we term “super-risks”. These super-risks are popular with large insurers because bundling of homogeneous risks, such as catastrophe risk across perils and territories, into single “super-risks” products, enables capital efficiency and increases reinsurance purchasing efficiency through greater coordination. For instance, the resurgent American International Group (AIG) is undertaking a significant consolidation of its property per risk reinsurance by buying a single U.S.\$1.5b global treaty, further demonstrating the trend of major insurers to streamline their own risk transfer into single super-risk products.<sup>15</sup>

Super-risk products are, therefore, growing, indicating the effects of consolidation in the primary insurance industry upon the reinsurance product. These products then replace the standalone local products (outlined above) of local companies that have been acquired. Namely, as they acquire new companies, reinsurers consolidate all the separate reinsurance programs that these smaller insurers used to buy, as one CEO of a major global insurance company explains: “So in the last 10 years [we] have doubled in size with acquisitions in the States and Europe. Our original model was probably lots of small businesses that all bought their own programs. But as we’ve been through this expansion program, virtually every acquisition we do, you get a reinsurance synergy from either not having to buy the program or combining it with your existing program. So, there’s been an evolution toward combining programs through our acquisitions. A few years ago we realized that allowing our businesses to pick and choose was inherently inefficient. So we decided to set out and do a global deal” [Cedent, interview]. Importantly, from a reinsurance perspective, as global reinsurers shift to centralized buying it means that premiums no longer flow from local programs and the overall amount of premium ceded is reduced, as one reinsurer explains: “They went from buying proportional to non-proportional and stopped ceding treaties from local operating entities. A lot of meat from the bone was gone for us; we lost 50% of our premium just due to this” [Reinsurer, interview]. Such dynamics help explain the increased competitive pressures on reinsurers outlined in the first section of this article.

### Summary

Overall, our research suggests the following trends in terms of cedents’ reinsurance product needs: 1) as some of the “traditional” reinsurance products mature, such as bouquet (single territories, multiple types of risk) and standalone (single risk-type single or similar territories) products, demand will progressively decline; 2) the demand for other products, such as super-risks (covering multiple, or even global territories)<sup>16</sup> will grow. Such changes require reinsurers to keep abreast of change in order to match their supply of capital with changing patterns of demand. We, therefore, end with further implications of such trends for reinsurance executives.

---

<sup>15</sup> Source: <http://www.insuranceinsider.com/consolidation-fuels-centralised-reinsurance-buying-trend?>

---

<sup>16</sup> For ease of explanation in this analysis, we do not distinguish between Excess of Loss (XL) and proportional products but rather refer to overall trends in the product types we have previously described.

Cedent type	Product type	Meaningful partnerships	Implications for different types of reinsurers
Global [growth]	Super-risks and ART	Large - highly analytic - reinsurers	Highly analytic; Large player
Regional [growth]	Super-Risks and ART	Medium/Large - highly analytic - reinsurers	Comparatively comfortable; Larger and – to a lesser degree – moderate sized reinsurers
Local [Decline]	Local programmes	Meaningful partnerships possible with all types of reinsurer	Difficult space: smaller/less analytic reinsurers who relied on these
	Bouquets [Pushed out increasing demand for analysability]	Less analytic (close to market) reinsurers	Low-tech; size less relevant. Niches still available through local market knowledge
Emerging [Small in premium terms]	Local Bouquet		

Growth
  Decline
  Small in premium terms

**Table1. Matching reinsurers and insurers: who is most impacted by trend**

### Final considerations on reinsurance product evolution

There are three main issues that arise from the super-risk product and super-cedent growth, which we highlight below. We also suggest ways in which reinsurers can reflect upon these issues in relation to their specific strategic positions and goals.

#### Issue 1: Pressure on smaller reinsurers

From the reinsurer's point of view, there is a shift from multiple standalone products each yielding smaller, territory-specific premiums, to fewer, larger multi-territory reinsurance products each yielding large premiums. The distribution of global premium thus also shifts toward these super-risks – forcing more and more reinsurers to find ways to offer such products. This puts pressure on smaller players in the reinsurance industry, who struggle for relevance because they can only write a tiny fraction of the overall deal. They, therefore, may be ignored, or squeezed out of such deals. This difference in perspective is outlined from the perspective of a large cedent and a small reinsurer:

- **Large cedent:** “We felt we had such long-term strong relationships with three or four global players that we should leverage to cement a proper long-term relationship and make them our core providers. So, we’re really a believer in supporting the stronger balance sheets, the quality players,” (Cedent interview).

- **Small reinsurer:** “If we talk about the 10 biggest insurers; if you look at their programs it's going to be a worldwide Cat XL: \$2 billion of capacity. What can we do? How can we be with them? We just haven't got the modelling and also capital and capacity to be a meaningful partner to them.” (Cedent interview).

For example, the majority of QBE's global programs are placed with three large reinsurers; and recently, much of the remaining available premium (20%) has been placed with Berkshire Hathaway.<sup>17</sup> In short, the above changes may be responded to more effectively by larger reinsurers, while other reinsurers may struggle to maintain meaningful partnerships with such large cedents. Nonetheless, as Table 1 shows, smaller reinsurers may still be well positioned to exploit niches in fast-growing emerging markets through in-depth client knowledge.

#### Issue 2: Change in reinsurance operations and resources

Super-risks are a complex product, covering multiple territories and perils. This has interrupted the direct link between the origin of risk and its cover that is prevalent in stand-alone products. It has also made it more difficult for the requisite knowledge to underwrite a deal to reside in a particular person or role (i.e., a single underwriter). Instead, reinsurers have to increasingly

17 Source: <http://www.insuranceinsider.com/berkshire-continues-push-with-15-qbe-reinsurance-deal>.



work in teams and in particular rely on technical resources to analyze these complex deals. Super-risks are grounded in more complex financial modelling than existing products, and so require different competencies and technical infrastructure from the reinsurers underwriting them than standalone products. As super-risk programs increase, fewer reinsurers can handle the level of analysis required. Reflecting on the analytical competences that comes with the complexity of such deals, one manager of an insurance firm said of his super-risk deal: "Getting the risk home was more difficult just because it's hugely complex and if you like it, you know, the [Company 1 and 2] put six months' work in to it to understanding it" [Cedent interview]. If reinsurers are to reposition themselves to offer super-risk products, they need to acquire these skills and competencies and change their operating structure accordingly.

### **Issue 3: Growth of ART products that compete with reinsurance**

ART products are usually thought as "non-traditional" reinsurance products in that they are not generally offered by reinsurers, but instead by hedge funds and other providers of capital investment. Yet, these products are in a "growth" phase in the industry [Aon Benfield (2013a)]<sup>18</sup> and they are no longer separate from the reinsurance. For instance, they are an attractive option for larger cedents for a number of reasons, including diversifying between traditional and non-traditional risk carriers. For example, as the CEO of Allianz Re explains: "About one tenth of our overall natural catastrophe protection comes from Cat bonds. In conjunction with our protection against US natural catastrophe risks, the share of Cat bonds is considerably higher, about one-third."<sup>19</sup> ART products are securities whose returns depend on the occurrence of a specific insurance event [Fedorova (2012)]. This is often what large insurers require capital for: peak risks which could significantly impact their profitability or even survival. They are also well suited to the complex reinsurance, technicality and capital efficiency needs of larger cedents.

In short, from a reinsurer's point of view, ART products compete with traditional reinsurance products; and ILS products (which

include Cat bonds) are partial substitutes for traditional reinsurance. These partial substitutes, which are likely to continue to grow in their market share, alter the reinsurance product life cycle in ways that threaten existing standalone and bouquet products: as more premium goes into super-risks and ART, a declining share is left for standalone and bouquet products. It is clear that these trends have different implications for reinsurers depending on their positioning; for instance, they are particularly worrisome for late adopters and those without the technical or capital resources to participate fully in such a suite of products [Aon Benfield (2013b)].<sup>20</sup>

### **Summary: Recommendations for reinsurers**

The above discussion implies a number of recommendations for reinsurers, which we summarize here:

- ▶ As available premium from traditional "standalone" products decreases, reinsurers will need to protect their existing relationships with their most desirable local clients. They will, however, also simultaneously need to establish alternative bases for generating the volume of their revenue through developing the resources to partner with larger global clients.
- ▶ Smaller reinsurers need to be particularly mindful of defining a profitable niche for themselves in response to these trends. Given that they might be less obvious partners for large global firms, they need to look to niche areas where their size means they can offer bespoke services or specialize in particular areas of expertise. For instance, in a particular emerging market or specialty line of business. Smaller reinsurers might also look for appropriate joint ventures and partnerships with other capital providers in conjunction with developing and protecting profitable niche areas.
- ▶ To analyze mega-risks and meet the needs of global clients, it will be necessary for reinsurers to continue to invest heavily in analytical infrastructure and expertise. Those that do so will be the preferred partners of such global insurers because they are able to address their more complex needs.
- ▶ Reinsurers will increasingly be required to engage with ART products and new players (e.g., hedge funds) entering the reinsurance space. Those that are already proving more innovative in their approach to capital provision and cover will

---

<sup>18</sup> Source: <http://www.artemis.bm/blog/2013/09/02/strong-capital-inflows-bring-ils-cat-bond-market-to-new-high-aon-benfield/>

<sup>19</sup> Source: [https://www.allianz.com/en/press/news/business/insurance/news\\_2013-06-12.html](https://www.allianz.com/en/press/news/business/insurance/news_2013-06-12.html)

---

<sup>20</sup> Source: <http://www.artemis.bm/blog/2013/07/12/ils-and-collateralized-capital-flow-benefits-reinsurance-buyers-at-renewals-aon/>

be better placed in the coming years. This includes seeking the necessary expertise, partnerships and structures to position themselves as potential firms to front the delivery of these newer products.

## Conclusion

In this article, we have first highlighted the general trends resulting in increasing competitiveness in the reinsurance industry; using a strategy model [Porter (1980)] to structure our discussion. Second, we focused on a particularly salient area from which much of these competitive dynamics stem: consolidation in the primary industry, which we describe as part of life cycle analysis of the insurance sector. Third, we highlighted how the industry life cycle in the insurance sector is impacting reinsurance buying, thus having important impact on the reinsurance industry that reinsurance executives should be particularly mindful of. Finally, we outlined some specific implications for reinsurance executives and firms, based on this analysis of changes in the product life cycle.

Through building an overview of the industry and focusing on consolidation in the primary sector, we sought to put some of the strategic decisions and difficulties facing reinsurers in context. This should provide those reinsurers with greater understanding of the challenges they face and, thus, how to cope with them.

## References

- AM Best, 2012**, "Top insurers ranked by assets, net premium." Best Week, January
- Aon Benfield, 2012a**, "Insurance-linked securities: evolving strength," Aon Benfield Securities
- Aon Benfield, 2012b**, "Reinsurance market outlook: record reinsurance performance and capital," Aon Benfield Analytics
- Aon Benfield, 2013a**, "Insurance-linked securities: capital revolution – ILS market expands to new heights 2013," Aon Benfield Securities
- Aon Benfield, 2013b**, "Increasing velocity of new capital flows benefits reinsurance buyers," reinsurance market Outlook, Aon Benfield
- Applebaum, S., 2012**. "U.S. P&C consolidation: The end game?" Aite, <http://aitegroupblog.com/insurance/u-s-pc-industry-consolidation-the-end-game/>
- Bougen, P. D., 2003**, "Catastrophe risk," *Economy and Society* 32(2), 253-274
- Conning, 2013**, "U.S. and global insurance outlook," Hartford, Connecticut: Conning, Inc.
- Datamonitor, 2011**. Industry profile: global reinsurance, New York: Datamonitor.
- Deloitte, 2012a**, "Top ten issues for insurance M&A in 2012," Deloitte Development LLC.
- Deloitte, 2012b**, "Global insurance outlook. Generating growth in a challenging economy takes operational excellence and innovation," Deloitte Development LLC.
- Fedorova, A., 2012**. "European consultants pitch insurance-linked securities," *Global Money Management*, 30 January
- Insurance Europe, 2013**. "European insurance in figure. Statistics No46," Brussels: Insurance Europe
- Jarzabkowski, P., M. Smets, R. Bednarek, and A. Allocato, 2013**. "Re-think reinsurance," *Global Reinsurance Masterclass Series*
- Jarzabkowski, P., A. Allocato, R. Bednarek and M. Smets, 2013**. "Fit for purpose? How to tailor reinsurance products to insurance lifecycles," *Global Reinsurance Masterclass Series*
- Klepper, S., and J. H. Miller, 1995**, "Entry, exit and shakeouts in the United States in new manufactured products!" *International Journal of Industrial Organization* 13, 567-591
- Kopt, E. W., 1929**, "Notes on the origin and development of reinsurance," *Proceedings of the Casualty Actuarial Society* 16, 33/34
- Loubergé, H., E. Kellezi, and M. Gilli, 1999**. "Using catastrophe-linked securities to diversify insurance risk: a financial analysis of CAT bonds," *Journal of Insurance Issues* 22(2), 125-146
- Peltoniemi, M., 2011**. "Reviewing industry life-cycle theory: avenues for future research," *International Journal of Management Reviews* 13(4), 349-377
- Porter, M. E., 1980**, *Competitive strategy*, New York: Free Press
- Porter, M. E., 2008**, "The five competitive forces that shape strategy," *Harvard Business Review* 86(1), 78-93
- Reactions, 2012**, "The reactions guide to insurance markets 2012," Reactions, London
- Tuohy, C., 2008**. "Reinsurance: mired in the past and ripe for reform," *Risk and Reinsurance*; <http://www.riskandinsurance.com/story.jsp?storyId=113635386>



#### About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit [ey.com](http://ey.com).

© 2014 EYGM Limited.  
All Rights Reserved.

EYG No. CQ0106



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

[ey.com](http://ey.com)

The articles, information and reports (the articles) contained within *The Journal* are generic and represent the views and opinions of their authors. The articles produced by authors external to EY do not necessarily represent the views or opinions of EYGM Limited nor any other member of the global EY organization. The articles produced by EY contain general commentary and do not contain tailored specific advice and should not be regarded as comprehensive or sufficient for making decisions, nor should be used in place of professional advice. Accordingly, neither EYGM Limited nor any other member of the global EY organization accepts responsibility for loss arising from any action taken or not taken by those receiving *The Journal*.

Accredited by the American Economic Association

ISSN 2049-8640

---